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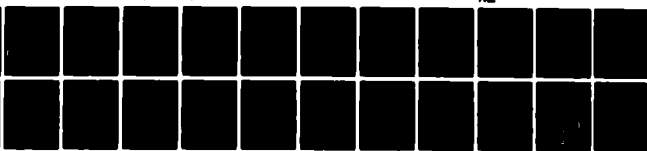
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US ARMY WAR COLLEGE
INDIVIDUAL RESEARCH BASED ESSAY

NURSE SHORTAGE: FACT OR FICTION?

BY

DONALD A. JOHNSON
LTC, MSC



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INTRODUCTION

The American Hospital Association¹ and the National League of Nurses² currently estimates that a shortage of as many as 100,000 nurses exists nationwide. An ABC News special, in October 1981, also reported the frightening fact that nurses are leaving the profession at such a rate that "a crisis in health care"³ could result. To further compound the nurse shortage question, the US Bureau of Labor Statistics projects that 85,000 new nurses will be needed each year to fill current and projected vacancies through 1990;⁴ but in 1980, the combined output from schools of Nursing only amounted to 75,000 registered nurses.⁵ Yet on the other hand, some government economists feel that by reemploying some of the 423,400 nurses in the inactive pool and by substituting less qualified personnel to perform nursing functions, the perceived nursing shortage can be overcome.

Whether there really is a shortage of registered nurses or merely an insufficient number who are willing to work is a matter of great concern to the federal government and the Health Care Industry. The spiraling cost of medical care; the increased demands that are being placed on professional nurses due to advances in medicine and technology; and the proposals being staffed by the present administration to cut nurse manpower funding — all serve to suggest that a review of the nurse shortage issue should be undertaken. Similarly the implications of a national nurse shortage in the private sector can have an equally

negative impact on the military medical capability to provide care for the American soldier. This is particularly true when one considers the required levels of registered nurse staffing needed to meet our wartime planning scenarios.⁶ Accordingly, in this research based essay, I will discuss the present supply and distribution of registered nurses (RN) within the United States; evaluate the federal involvement and trends in nursing education as they impact on nurse supply; and assess the demand for nurses as viewed by health care institutions. Finally, I will examine the implication that the nurse shortage has on military preparedness and offer some proposals to solve this national health manpower issue.

SUPPLY AND DISTRIBUTION OF NURSES

Government economists and principal leaders in health care have debated about the adequacy of the nurse supply for over a decade. According to the latest National Nurse Survey, prepared by the American Nurses Association (ANA), there were an estimated 1,401,633 registered nurses licensed to practice within the United States.⁷ Of this total nurse population, 70 percent or 978,234 were employed in nursing. This rate of employment represents a significant accomplishment, in that it is higher than the 50.8 percent of labor force participation rate for all work eligible women.⁸ The survey analysis further reveals that a direct relationship exist between the age of nurses and their employment in nursing. Employment rates for those nurses in the younger age groups were remarkably higher, except during their childbearing years. After age 45, a general decline in nurse employment can then begin to be observed. Additionally, research has shown that there are many other

factors operating, other than age, that govern whether licensed nurses elect to remain in practice. A look at marital status, male vs. female strengths, and salary provides valuable insights about nurses in practice. Marital status for the group revealed that 14 percent were unmarried, 72 percent were married, 5 percent were widowed, and 8 percent were divorced. Employment rates for those nurses who were single, divorced or separated were higher by far than those who were married.⁹ The male vs female information shows that 26,991 of the registered nurse population were male. This figure is nearly double the number of male nurses reported since the 1972 ANA Survey.¹⁰ The growth in male nurse population is important to note but researchers don't look for dramatic changes in the nurse employment levels as a result of these increases. Nursing is and probably will remain primarily a female profession.

Salary is, without question, one of the primary factors that many feel influence the entry-exit rate of nurses in practice. New nurses entering the profession today can expect reasonable compensation because of the expressed shortage and the increased competition between hospitals and other health agencies for their services. On the average, registered nurses within the civil sector will be offered \$8.49 an hour.¹¹ The shortage suggested will likely persist, especially since patient census continues to grow, and since the acute patient who is admitted to the hospital requires more intensive care over shortened lengths of hospital stay. The pressure and demand for nurses is mounting but unfortunately salaries have not kept pace. Regional variations in pay, as well as size and type of medical institution causes compensation to vary thousands of dollars per year.¹² Benefit packages must also be taken into account when one begins to address the mechanisms

being applied to attract and retain nurses. Prospective employers, in light of the shortage, have started to offer such incentives as tuition assistance for advance training, insurance programs, housing subsidies, cars, bonuses for special shifts, and even day care services.¹³⁻¹⁴ Notwithstanding any of the positive incentives discussed, there appears to be little compensation for experience in the practice of nursing. For example: a nurse entering the work force may be paid an average salary of \$13,000 per year, and her nurse co-worker, let's say with 20 years experience, may only make \$23,000 per year.¹⁵ Also, reports from the US Department of Health and Human Services show that nurse salaries have lagged behind the national per capita personal income over the period 1966-78 and 1972-1978, respectively. Today, annual salary for nurses, in the main, still fall behind teachers, construction workers, and other health care professionals. In sum, the small salary differential provided for experience and demonstrated skill; the lack of competitive salaries between nursing and other occupations, and the increased demands being placed on nurses due to larger patient census make salary alone a weak economic predictor for attracting and retaining nurses in employment.¹⁶

Now by turning our attention to the 30 percent or 423,400 registered nurses who are not employed in nursing,¹⁷ we can conclude our discussion about the supply and distribution of nurses. Many officials within and out of the health care industry feel that this inactive group of nurses could be used to solve the shortfall of 100,000 nurses that exists within the nation's hospitals and nursing homes.¹⁸ At the outset, 324,005 of these nurses were not employed nor were they seeking employment (see figure 1). Forty six percent of this inactive group were also noted to be over age 60 and unlikely to be candidates for

recruitment. Equally as revealing, the data reflects that many of these personnel were employed in other fields and only about 3 percent were actively seeking to return to nursing. Of the remaining 54 percent, 100,000 were under 40 years old and were primarily in their childbearing years. A residual group, estimated at 125,000, would appear to be the pool of genuine candidates to target to return to active nursing.¹⁹ However, the recruitment of this inactive pool will not only be time consuming but will be equally as expensive to both the federal government and the health care industry. Many of these nurses are in fact over 40 years old and have been out of nursing from 10-30 years.²⁰ An extensive recruitment effort, followed by training, refresher, and indoctrination programs will have to be set into motion. Skill up grade will be a major issue. One can only conclude that the inactive pool of registered nurses is not as fruitful a source for alleviating the nurse shortfall as many investigators may believe.

To summarize, we have learned that there are more registered nurses in practice today than ever and that salaries, if not used properly, can have a negative impact on the levels of nurse employment. Furthermore, the manpower information indicates that the inactive pool of nurses should be looked at as a source of supply, but this pool should not be looked upon as a "quick fix" solution to the estimated 100,000 nurse shortfall. The evidence would infer that we must look beyond the present supply and distribution of nurses for solutions to the nurse shortage question. Perhaps a brief look at nursing education will add further clarity to this complex issue.

NURSING EDUCATION

No discussion about nursing education would be complete without first considering the role that the federal government has had in nurse education and training. Our nation has experienced a recurrent shortage of registered nurses over the past 30 years, the most recent of which was in 1979.²¹ As testimony presented before the 96th and 97th Congress regarding the Nurse Training Act shows, no answer to resolve the nurse shortage problem has yet been found. Historically one can trace the federal government interest in nurse training back to 1964 when P.L. 88-581 established the Nurse Training Act.²² This most comprehensive legislation sprang from a special consultant report on nurses prepared for the Surgeon General. The findings of the report were presented to the Congress in 1964 by President Johnson in the form of several key recommendations. He recommended that authorization grants be approved to build and enhance schools of nursing; and that measures be taken to limit the financial obstacles that precluded nurse candidates from entering training. The passage of legislation in 1966, 1968, and 1971 continue to evidence the concern over the short supply of nurses. With the passage of each piece of legislation you can see the refinement of per capita grant provisions, and the insertion of training for nurse practitioners.²³ It was not until the Nixon administration that government economists began to view the Nurse Training and supply problem with some skepticism.²⁴ This trend can be seen in each successive administration since that time. President Ford, whose pocket veto of P.L. 94-63 in 1975 after adjournment of the 93rd Congress and one year later before the 94th Congress, sent a clear signal that the support of nursing train-

ing programs was not a national priority. He considered the authorizations proposed too expensive. Congress, seeing the matter somewhat differently, overrode the veto. In 1978 the 95th Congress passed a two-year Reauthorization Act. This Act met a similar fate as President Carter exercised his executive power of veto, claiming that the spending levels were excessive.²⁵ He felt that federal assistance "should be limited to geographic and speciality areas that need nurses most". The nurse training programs were only kept alive through funding made available by the passage of the FY 79 Continuing Resolution. In 1979, a one year nurse training reauthorization bill, P.L. 96-76, was enacted; and in 1980, Congress began formal hearings on the question of combining the nurse training with the Health Professional Education Assistant Act.²⁶ Administrative delays precluded the consolidation of the committee reports before the 96th Congress adjourned. As the 97th Congress confers in hearings about the renewal or modification of the Nurse Training Act, the nurse shortage remains. The Administration undoubtedly will continue to challenge the support Congress has given the nurse training programs in the past. The trend toward doing away with cash incentives designed to stimulate schooling for nurses could have a major drawback on nurse training and certainly could curtail supply. The question that one must ponder is if the existing training programs, faced with the almost certain reduction in federal funding, can meet the present and projected nurse supply requirements through 1990.

During the past 50 years, extraordinary efforts to increase nurse supply have resulted in the establishment of several types of nurse training programs, each with a somewhat different orientation to the practice of nursing.²⁷ Within the nation's 1,403 nursing schools, three types of programs²⁸⁻²⁹ are in use to prepare graduates for license as

registered nurses. The first and the oldest of these is the diploma program. These programs are based in community hospitals, are three years in length, and the graduates are generally hired to work within the hospital systems where they are trained. The second type is the Associate Degree program. In these programs basic nursing education is provided in a two year Community or Junior College. Such programs, which sprang up in the 1960s, attract older students who have been removed from high school for some years. As one can imagine, the hands-on orientation for these students is not necessarily the same as the orientation experienced in the Community hospital based-Diploma Programs. The final type, The Baccalaureate Program, is a four year college program that provides not only nursing education but also opportunities for students to undergo studies in the Liberal Arts and Sciences. Operational Program statistics from the 1980 National League of Nursing show 311 programs in operation leading to a Diploma, 707 to Associate degree and 385 to Baccalaureate degree.³⁰ These figures show a movement in nursing education from the hospital setting to academic institutions. One can perhaps trace this trend back to a 1965 American Nurses Association (ANA) position paper that envisions, by 1985, the Baccalaureate degree as the minimal educational preparation for entry into professional practice.³¹ This early proposal was subsequently followed-up by a 1978 ANA resolution. The resolution outlined a two level nursing education system that provides for a professional nurse -- who would be trained in a 4 year college based program; and a technical nurse -- who would undergo schooling in the two-year associate degree institutions. The overriding rationale for this shift seems to be linked to the demands that nurses will face in the 1980s.³² Many nurse

professionals think the enhancement of scientific knowledge, improvements in administrative and behavioral science skills, and the expansion of educational opportunity will materially contribute to sustaining nurses in practice for longer periods of time. In fact, over the past 12 years, Bachelor of Science in Nursing (BSN) programs have more than doubled, Associate degrees have shown an even larger expansion and Diploma programs are half the number they formerly were.³³ Accordingly, the nurse training base appears adequate to build the nurse supply, but a look at the productivity indicators, admissions and numbers of graduates, will complete our review of nursing education.

In contrast to the rise in nursing education programs, admissions to Registered Nurse (RN) schools have declined during the period 1978-80.³⁴ The losses, in this three year period, were highest in diploma and baccalaureate programs. Associate degree programs showed a slight increase for the same period. Surprisingly, 1981 fall admissions increased for all RN programs. This was unusual, since 75 percent of the students for diploma and baccalaureate programs come from the shrinking high school graduate pool of eligibles. A reversal in this gain is expected for 1981-82 when admissions are projected to again decline. Nurse graduates also show a decline for the past two years. Based upon the above information, it is anticipated that a decline in RN graduates will continue through 1983, followed by a short period of stability based upon the 1981 unusually high admission rate. The decline will likely resume and continue through 1985³⁵ and beyond as program outputs will be far less than the 75,000 graduates for 1980.

Recalling the Bureau of Labor Statistic estimates that 85,000 new registered nurses will be needed annually through 1990, it becomes obvious that an insufficient number of nurses are being attracted into

nurse training to meet the projected demand. A look at some of the factors that influence nurses enrollment will prove helpful in explaining the overall decline in nurse admission and graduates.

Demographic data of the United States suggest that the population of 18-20 year old, high school graduates, will continue to fall over the next decade. This decline in high school age youth has caused a reduction in the number of potential entrants to all occupations and professions. Competition for the "best and the brightest" will become even more intense. This will be particularly true for nursing as recruiters attempt to attract students with high math and science aptitudes. Even if nursing schools were able to maintain the current ratio of admissions of high school graduates, which is unlikely, testimony from the July 1981 Commission on Nursing Programs indicates that the decline in overall admissions is likely to continue.³⁶ The admission rates from Community Colleges, that had previously shown an increase of as much as 37 percent between 1962 and 1975 for students over 21 years old, have begun to level off.³⁷ This circumstance of declining enrollments and graduates is also linked to the remarkably high number of employment options now open to women. Their quest for greater professional recognition and economic rewards has caused them to seek out more lucrative professions. One can note during the period 1970-80, law school admission rates have grown from 7,000 to 42,000.³⁸ Similar increases in enrollments in medical schools, schools of business, and other professional programs can be noted. Even in the occupational areas, such as clerical and technical fields, economic rewards are surprisingly competitive with nurses. Finally as the overall cost to train a registered nurse approaches \$25,000,³⁹ many students will not be able to seek a career in

nursing without some form of public assistance.

On the whole, the national nurse training base is capable of producing the number of nurses needed. However, the decline in program admissions and graduates since 1978, the increased competition involved in attracting high school graduates into nursing, and the overall training cost that students must bear make it very unlikely that the traditional supply of nurses from nursing schools will be able to meet the demands. Without some form of joint subsidy to stimulate recruiting by the federal government and health care institutions, the supply of nurses will continue to decline.

MEDICAL INSTITUTIONS' DEMAND FOR NURSES

We are now at the point in our discussion about the nurse shortage to examine the status of nurses working in health care institutions, and to assess the impact that institutional demands have on nurse supply. Although no specific formula or model exists to scientifically explain how hospitals compute their need for nurses, the American Hospital Association uses the notion of funded vacant full-time positions as the means to estimate their nurse shortage. As of this writing, 88 percent of the nation's hospitals cannot fill all their full-time nursing slots.⁴⁰ The magnitude of this shortage is influenced by geographical region and density of medical facilities within a given area. For example: In the New England States, where medical facilities are abundant, the nurse shortage is characterized as minimal. Yet in areas where facilities are more limited, such as Arkansas and other states in the South Central Regions, the shortage is significantly more acute.⁴¹ The shortfall is made even greater by the introduction of new or improved medical practices and technology. According to the American

Nurses Association, intensive care beds grew from 28,964 to 41,115 during the period 1972-78.⁴² Growth in coronary care, burn units, and facilities for the aged also helps to explain why health care institutions are short of nurses. However impressive these points are, there are other factors involved within health care institutions that influence the magnitude of the shortage.

Employee turnover is looked at in manpower management circles as being essential to the growth and viability of any organization.⁴³ It provides for the phasing out of less desirable and introduction of new personnel with improved skills and knowledge. As long as management is in control of this phenomenon, it can have positive effects. But such does not appear to be the case today as many nurses are voluntarily leaving hospitals due to widespread dissatisfaction over conditions of work.⁴⁴ Poor working relationships between the physician, administrator, and nurse are cited as one of the major pitfalls in nurse retention. Today's nurses refuse to be cast in the role of angels of mercy and hand maidens to doctors. They desire a more active role in supervision of care, management of resources, and facility administration. This point is quickly driven home when you consider that nurses are required to provide 24 hour care to acutely ill patients, under conditions of increasing stress, and primarily in the absence of physicians. Low nurse to patient staffing ratios also present difficulty for nurses. In many instances, these important decisions on staffing are made by hospital administrators without the essential coordination with nurse administrators charged with the planning and supervision of "hands on" care. I would be remiss if I failed again to mention the impact that salary and benefits have on nurse retention. Based upon the levels of

education that nurses are now attempting to achieve, it becomes axiomatic that they desire competitive wages with other professions. They have heard the rhetoric from the health care industry about nurses being an integral part of the health care team and are now seeking just compensation for the skills, knowledge, and experience they possess. The general conditions within the work environment itself also serve as a principal contributor to voluntary terminations. The quality of patient care provided, although difficult to measure, seems to have an impact on nurse decisions to remain in practice. When nurses who work in intensive care units, or even on traditional wards for that matter, are subjected to excessive patient loads and insufficient time is available to provide the level of care they have been trained to deliver, unusual stress occurs and the quality of care is compromised. This condition is not only prodded by the existing shortage but is exacerbated when medical administrators misuse their nurse staffs. The Co-Chairman of the American Hospital Association's Commission on Nursing commented that hospitals must rethink and restructure their nursing policies to let nurses perform nursing care and let others attend to hotel functions.⁴⁵ If health care administrators continue to use nurses as substitutes for ward clerks and hospital orderlies; fail to recognize staffing, pay and benefit issues; and remain insensitive to the changing role of nurses — voluntary attrition rates are sure to climb. Nurses will only remain in an environment that is professionally satisfying, one in which they are given an opportunity to provide safe and well coordinated patient care.

The assessment of the supply and demand for nurses by the health care industry has shown that 88 percent of the nation's medical facilities are short nurses. Taking regional differences into account, some

states are worse off than others, with states in the South Central Regions being most affected by the shortage. Advances in medical practice and technology can indeed be cited as reasons for the pervasiveness of the shortage. No one will argue that care of the aged and enhanced specialized treatment units are not necessary. But one is forced to wonder if the inactive pool of nurses and the traditional sources of supply, the nations nursing schools, can alone solve the nurse shortage problem. My research says they will not. With the almost guaranteed reduction in federal funding and the increased competition from other professions, the nurse supply will undoubtedly fall short of the need. At this point, the health care industry must look inward and take action to reduce voluntary turnover in their nursing staffs. It must be recognized that unless new and innovative approaches are undertaken to retain trained nurses in practice,⁴⁶ a crisis in health care is not beyond possibility. Medical facilities can ill afford to continue to fund extravagant incentive programs for the recruitment of nurses. Although effective they only offer short term solutions to the shortage problem. The resolution of the nurse shortage in the civilian sector will require action to influence the supply of nurses through continued educational subsidies, and the initiation of nurse retention strategies that focus on improving the professional environment and conditions under which they work.

MILITARY MEDICAL PREPAREDNESS AND THE NURSE SHORTAGE

The nurse shortage also impacts on military medical preparedness. One of the major challenges the Army Medical Department will face during the next decade is recruiting sufficient nurses to staff active, Reserve

and National Guard units.⁴⁷ Until the early 1970s, when budget restrictions and policy changes reduced military nurse subsidy programs, there were a number of military nurse procurement sources available. In 1978, one sadly watched the final graduates from the Walter Reed Army Institute of Nursing enter on Active duty, closing out one of the most productive sources for commissioned nurses.⁴⁸

Today the Army must compete for nurses, like other health care institutions, in a most troubled and turbulent labor market. The Army was able to achieve its FY 81 nurse recruiting objective of 1000 USAR officers and 401 active duty accessions, but according to Chief Nurse's Office, at the U.S. Army Recruiting Command, the market is tightening.⁴⁹ The principal limiting factor in attracting nurses appears to be the lack of competitive starting salaries. The recent passage of the Defense Officer Personnel Management Act (DOPMA) will also likely affect the ability of nurse recruiters to meet their objectives. The provisions of this act have reduced the award of constructive credit for experience for nurses entering on active duty. In FY 80 and 81, for example, a combined average of 55 percent of Army Nurse Corps (ANC) active duty accessions and 70 percent of USAR accessions received constructive credit for experience and were qualified to enter active duty in the rank of 1LT or above.⁵⁰ In this instance the Army was able to attract more experienced nurses from a broader base and in turn use them in solving many unique staffing problems. This is now not possible under DOPMA. The point about salaries can be made when one compares pay in the civilian market with that in the military. An average starting salary for BSN registered nurse graduate in the United States is \$16,310 as compared to \$14,397 for a 2LT nurse entering on active duty.⁵¹ With the loss of the key procurement incentive -- the award of dollars for

experience — the Army may experience trouble meeting future nurse recruiting objectives.

Does the Army have sufficient military nurses on active duty? Can contingency requirements be met with the uniformed nurse assets now available? How effective are the contingency plans for overcoming the post mobilization manpower needs? These are the questions about military medical preparedness that must be asked to really comprehend the magnitude and impact of the national nurse shortage. Department of Defense (DOD) initiatives to address medical manpower shortages over the last ten years has focused primarily on the recruitment of physicians. These efforts have succeeded and in fact, the Army anticipates that it will have sufficient military doctors to support contingency theater requirements by 1987.⁵² Overall nurse strength has also increased during this period, but the increase has been largely in civilian as opposed to military nurses. Force reductions, commercial activities conversions and civilian substitutions have plagued initiatives to increase active component Army Nurse Corps end strength. Discussions by Army medical planners with Office of the Secretary of Defense (OSD) and the Congress point out that this condition places the medical care capability to support contingencies at risk. Presently the shortage of active duty nurses hinders the Army Medical Department from responding to time phased requirements specified in Total Army Analysis '87.⁵³ An estimated 1200 additional active component nurses will be required to satisfy theater requirement at M+10. The Surgeon General is actively pursuing this matter with the Army staff and plans are being made to make it a major issue at the February 1982 Select Committee (SELCOM). A program development increment package is being prepared

which seeks to increase active component nurse end strength by 539 over program years FY 84-88. Favorable approval of this proposal will enhance the readiness posture of deploying units and will also create additional demands on the already tight national nurse supply.

Another challenge that will face the mobilization planner is to determine where the supply of nurses will come from to satisfy the staffing requirements during the early months after mobilization.⁵⁴ The luxury of long lead times for medical force mobilization are gone. Nurses will be required almost immediately to fill direct patient care responsibilities. It is estimated that 11,237 nurses will be needed by M+70 to fill Reserve, National Guard, and Individual Ready Reserve spaces.⁵⁵ Many planners feel that the supply of nurses within the nation is adequate to meet these demands. However, based upon this research, it is doubtful if these nurses could be made available in time to reinforce and support already deployed forces. Even if available — training, skill upgrade, and military indoctrination will delay deployment of these nurses up to 12 weeks.⁵⁶ An even more pressing problem is the identification and location of available nurse assets. The Selective Service System, as it is currently organized, is not capable of performing this vital task. Additionally, differences of opinion between the Selective Service System and DOD over the drafting of women has delayed the passage of stand-by legislation⁵⁷ to draft nurses and other medical personnel. One can only conclude that the DOD medical planning capability as well as the Selective Service System are not presently capable of extracting the required number of nurses from society to meet wartime contingency requirements.

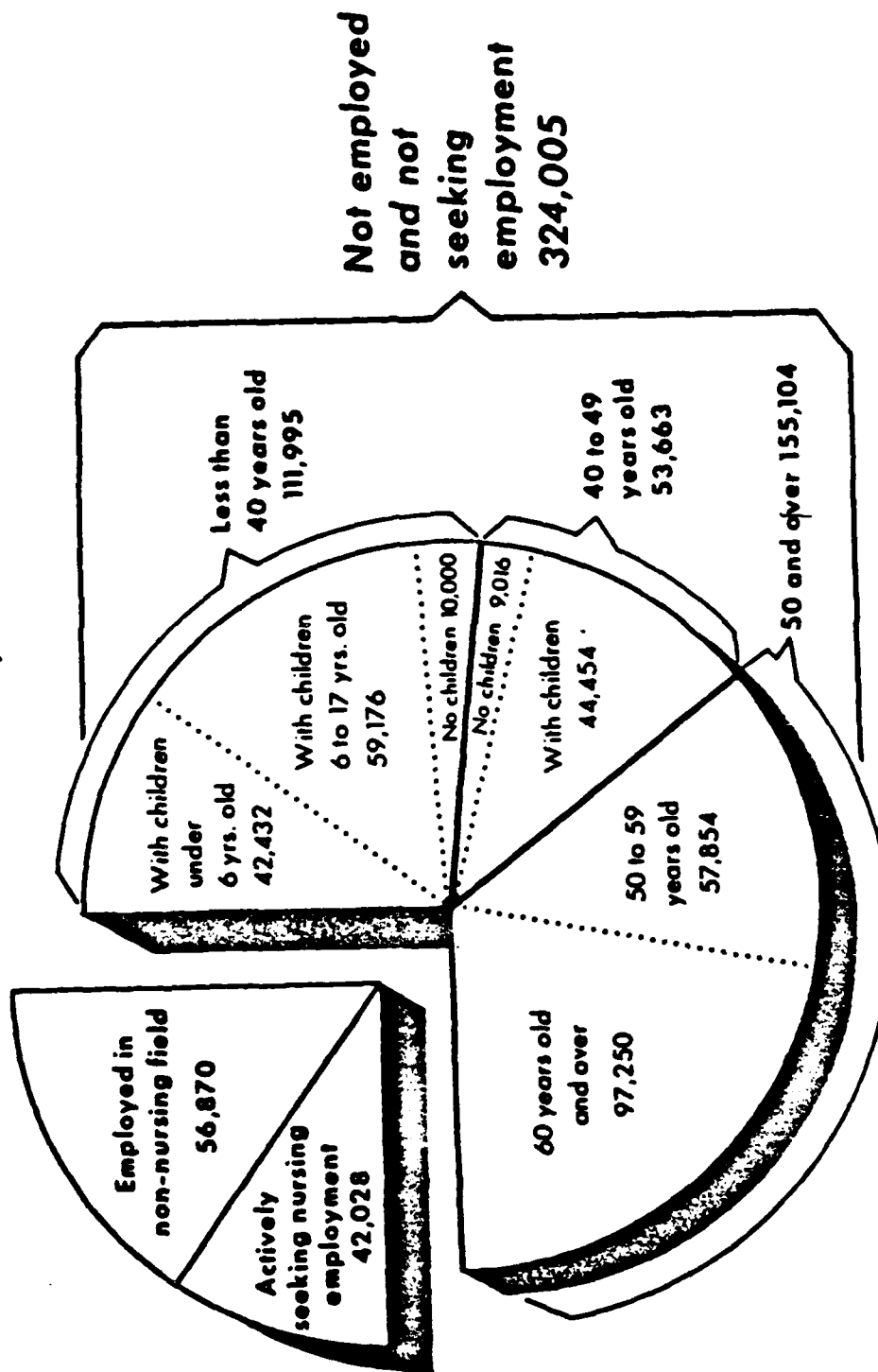
CONCLUSION AND RECOMMENDATIONS

In conclusion, my research has established that many of the nation's health care facilities are experiencing a shortage of registered nurses. However, I am restrained from concluding that a national nurse shortage exists because of the imprecise methods available to assess the true relationships between nurse supply and demand. Notwithstanding the knowledge gained about the nurse population and distribution has provided valuable insights into the areas of nurse education and supply, nurse productivity, and military medical preparedness. These insights can be used to suggest actions to resolve this national health manpower issue. It is clear that the supply of nurses is declining. Unless the government and the health care industry jointly combine resources to reverse this trend, the quality of medical care will be compromised. Advances in medical science and technology also dictate that we need more not fewer nurses. To this end, I recommend that subsidies be directed at the development of national nurse recruiting programs, and that nurse student loans and scholarship programs be continued. Nurse productivity primarily rests in the domain of health care institutions. The productivity of nurses can be increased if hospital administrators improve the conditions under which they work. Nurses will no longer tolerate being treated as hand maidens for doctors or used to perform housekeeping tasks. Strategies must be developed to retain nurses in the work force and reduce the rate of voluntary turnover. This can best be accomplished by paying nurses competitive salaries and by creating a professional environment that provides for their active participation in planning, resourcing, and directing patient

care. Finally, the nurse shortage does have a negative impact on military medical preparedness. The significant shortfall of active component nurses at M+10, and the Reserve and National Guard at M+70 both serve to challenge the perception that sufficient nurses are available to meet the civilian and military needs at the time of mobilization. DOD and the Congress must begin to address the magnitude of the military nurse shortage by increasing active component nurse end strength and improving monetary and other incentives to attract nurses into Reserve and National Guard forces. Stand-by medical legislation that provides for the mobilization of women is a must if the care and treatment requirements of the combat theater are to be met.

NATIONAL SAMPLE SURVEY OF REGISTERED NURSES
 Characteristics of Registered Nurses Not Employed in Nursing,
 September 1977

N = 423,400



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